

CLAIMS

1. A crawler vehicle comprising a car body and a plurality of identical crawler assemblies, each said crawler assembly comprising a crawler track supported on a crawler frame, said crawler track being powered by a drive assembly.

2. The crawler vehicle according to claim 1, wherein the drive assembly for each crawler assembly comprises identical components.

3. The crawler vehicle according to claim 1, wherein the crawler frame for each crawler assembly comprises an identical track frame weldment.

4. The crawler vehicle according to claim 1, wherein the drive assembly for each crawler assembly comprises:

- a) a hydraulic drive motor mounted on said car body, said hydraulic drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses;
- b) a track drive gear box mounted on said crawler frame and connected to said crawler track, said gear box comprising a right-angle gear set and a speed reduction gear set; and
- c) a mechanical drive shaft for transmitting power from said hydraulic drive motor to said crawler drive gear box.

5. The crawler vehicle according to claim 4, wherein said mechanical drive shaft comprises a first and a second end, said first end being connected to said hydraulic drive motor and said second end being connected to said right-angle gear set, and wherein both of said connections comprise a universal joint and at least one of said connections is removable to permit disassembly of said crawler assembly from said car body without disconnecting said hydraulic drive motor from said hydraulic pump.

6. The crawler vehicle according to claim 1, wherein the drive assembly for each crawler assembly comprises a hydraulic drive motor mounted on said crawler frame, said drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses.

7. The crawler vehicle according to claim 6, wherein a track drive gear box is mounted between said hydraulic drive motor and said crawler frame.

8. The crawler vehicle according to claim 7, wherein said track drive gear box comprises a right-angle gear set and a speed reduction gear set.

9. The crawler vehicle according to claim 1, wherein said crawler vehicle comprises an upper works rotatably mounted on a lower works, said

lower works comprising said car body and said plurality of identical crawler assemblies.

5 10. A crawler crane having an upper works rotatably mounted on a lower works, said lower works comprising a car body and a pair of interchangeable crawler assemblies, each said crawler assembly comprising a crawler track supported on a crawler frame, said crawler track being powered by a drive assembly.

10 11. The crawler crane according to claim 10, wherein the drive assembly for each crawler assembly comprises identical components.

15 12. The crawler crane according to claim 10, wherein the crawler frame for each crawler assembly comprises an identical track frame weldment.

 13. The crawler crane according to claim 10, wherein the drive assembly for each crawler assembly comprises:

- 20 a) a hydraulic drive motor mounted on said car body, said hydraulic drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses;
- d) a track drive gear box mounted on said crawler frame and connected to said crawler track, said gear box comprising a right-angle gear set and a speed reduction gear set; and

- e) a mechanical drive shaft for transmitting power from said hydraulic drive motor to said crawler drive gear box.

5 14. The crawler crane according to claim 13, wherein said mechanical drive shaft comprises a first and a second end, said first end being connected to said hydraulic drive motor and said second end being connected to said right-angle gear set, and wherein both of said connections comprise a universal joint and at least one of said connections is removable to permit disassembly of said crawler assembly from said car body without disconnecting said hydraulic drive motor from said hydraulic pump.

10 15. The crawler crane according to claim 10, wherein the drive assembly for each crawler assembly comprises a hydraulic drive motor mounted on said crawler frame, said drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses.

15 16. The crawler crane according to claim 15, wherein a track drive gear box is mounted between said hydraulic drive motor and said crawler frame.

20 17. The crawler crane according to claim 16, wherein said track drive gear box comprises a right-angle gear set and a speed reduction gear set.

18. A crawler vehicle comprising a car body, a first crawler assembly and a second crawler assembly, said first crawler assembly being removably mounted to a first side of said car body, said second crawler assembly being removably mounted to a second side of said car body, said first crawler assembly and said second crawler assembly each comprising a crawler track supported on a crawler frame, said crawler track being powered by a drive assembly comprising a hydraulic drive motor, wherein said first crawler assembly is configured to be mountable on said second side of said car body and said second crawler assembly is configured to be mountable on said first side of said car body.

19. The crawler vehicle according to claim 18, wherein the drive assembly for said first crawler assembly and said second crawler assembly each comprise identical components.

20. The crawler vehicle according to claim 18, wherein the crawler frame for said first crawler assembly and said second crawler assembly each comprise an identical track frame weldment.

21. The crawler vehicle according to claim 18, wherein the hydraulic drive motor is mounted on said car body and is connected to a hydraulic pump by a plurality of hydraulic hoses, a track drive gear box is mounted on the crawler frame and is connected to the crawler track, said gear box comprising a right-angle gear set and a speed reduction gear set, and a

mechanical drive shaft is connected between the hydraulic drive motor and the gear box.

5 22. The crawler vehicle according to claim 21, wherein said
mechanical drive shaft comprises a first and a second end, said first end
being connected to said hydraulic drive motor and said second end being
connected to said right-angle gear box, and wherein both of said connections
comprise a universal joint and at least one of said connections is removable to
10 permit disassembly of said first crawler assembly or said second crawler
assembly from said car body without disconnecting said hydraulic drive motor
from said hydraulic pump.

15 23. The crawler vehicle according to claim 19, wherein the hydraulic
drive motor for each drive assembly is mounted on said crawler frame, said
drive motor being connected to a hydraulic pump by a plurality of hydraulic
hoses.

20 24. The crawler vehicle according to claim 23, wherein a track drive
gear box is mounted between said hydraulic drive motor and said crawler
frame.

 25. The crawler vehicle according to claim 24, wherein said track
drive gear box comprises a right-angle gear set and a speed reduction gear
set.

26. The crawler vehicle according to claim 18, wherein said crawler vehicle comprises an upper works rotatably mounted on a lower works, said lower works comprising said car body, said first crawler assembly and said second crawler assembly.

27. A crawler crane having an upper works rotatably mounted on a lower works, a boom pivotally mounted on said upper works, a load hoist line for lifting loads, said lower works comprising a two independently powered crawler assemblies each mounted on a car body, each said crawler assembly being of identical design and comprising a crawler track supported by a crawler frame, wherein each said crawler track is powered by:

- a) a hydraulic drive motor mounted on said car body, said drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses;
- b) a track drive gear box mounted on said crawler frame and connected to said crawler track, said gear box comprising a right-angle gear set and a speed reduction gear set; and
- c) a mechanical drive shaft for transmitting power from said hydraulic drive motor to said crawler drive gear box, said drive shaft comprising a first and a second end, said first end being connected to said drive motor, said second end being connected to said right-angle gear set, wherein both of said connections comprise a universal joint and at least one of said connections is

removable to permit disassembly of said crawler assembly from said car body without disconnecting said hydraulic drive motor from said hydraulic pump.

5 28. The crawler crane according to claim 27, wherein the drive assembly for each crawler assembly comprises identical components.

10 29. The crawler crane according to claim 27, wherein the crawler frame for each crawler assembly comprises an identical track frame weldment.

15 30. A crawler crane having an upper works rotatably mounted on a lower works, a boom pivotally mounted on said upper works, a load hoist line for lifting loads, said lower works comprising a two independently powered crawler assemblies each mounted on a car body, each said crawler assembly being of identical design and comprising a crawler track supported by a crawler frame, wherein each said crawler track is powered by a hydraulic drive motor mounted on said crawler frame, said drive motor being connected to a hydraulic pump by a plurality of hydraulic hoses.

20 31. The crawler crane according to claim 30, wherein the drive assembly for each crawler assembly comprises identical components.

